

**ABSTRACT**

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A method for processing a screw rotor includes a step of rotating a blade holder 2 while shifting the blade holder 2 in X-axis, Y-axis, and Z-axis directions to form a groove on the outer surface of a rotating cylindrical workpiece 1 with a tool 3 using a processing apparatus having a bed 11; a C-axis shaft supporter 12 disposed on the bed 11; a C-axis shaft 14 held by the C-axis shaft supporter 12, the C-axis shaft 14 for rotating the cylindrical object 1; a column 13 disposed on the bed 11; the blade holder 2 rotatably held by the column 13; and the tool 3 attached to the blade holder 2.